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| APPLICATION NO.                                                                                                                                                                                                                                                    | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/552,645                                                                                                                                                                                                                                                         | 10/07/2005  | Mukesh Dalal         | PD01                | 2733             |
| <div>Mukesh Dalal<br/>1533 Rio Grande Street<br/>Davis, CA 95616</div> <div>759012/20/2007</div> <div>EXAMINER<br/>RIFKIN, BEN M</div> <div>ART UNIT<br/>2129</div> <div>PAPER NUMBER</div> <div>MAIL DATE<br/>12/20/2007</div> <div>DELIVERY MODE<br/>PAPER</div> |             |                      |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/552,645

Applicant(s)

DALAL ET AL.

Examiner

Ben M. Rifkin

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. The instant application having Application No. 10552645 has a total of 20 claims pending in the application.

***Response to Arguments***

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-13, and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauerle et al (US 4992942 A) further in view of Chadwick (US 6853952 B2).
4. As per claims 1 and 11, Bauerle discloses "A method for optimizing an active decision-making process, comprising: a. creating a simulation model for the active decision making process" (C17, particularly L 58-64; *EN: This denotes simulating the decision tree, and computing outcomes*). "B. Generating a plurality of alternative decisions at a choice point in the active decision making process" (C7, particularly L39-64; *EN: This denotes selecting an option with the highest probability of achieving the desired result, which means there are multiple*

options to choose from). "C. For one of these alternative decisions, generating a simulation of the future decision making process using the simulation model" (C17, particularly L58-64; EN: This denotes using a simulation model to evaluate each path of the decision tree and compute the outcomes. This would include decisions made after the original decision in a standard tree fashion). "D. Analyzing the result of this simulation to select a decision for this choice point" (C17, particularly L58-64; EN: This denotes using the simulation to evaluate each path of the decision tree and compute outcomes). However, Bauerle fails to explicitly disclose, "Wherein the simulation model comprises a utility function that encodes profit and loss."

Chadwick discloses, "Wherein the simulation model comprises a utility function that encodes profit and loss" (C4, particularly L45-68; C5, particularly L1-15; c10, particularly L12-55; EN: This denotes determining the quality of a product (in this case, the growing of plants (a product) for pharmaceutical purposes). The quality, in this case, includes the profit and loss potentials of the product involved).

Bauerle and Chadwick are analogous art because both involve decision making using simulations.

At the time of invention it would have been obvious to one skilled in the art of decision making via simulations to combine the work of Bauerle and Chadwick in order to include profit and loss in simulations for decision making.

The motivation for doing so would be to "realize the greatest economic gain from commercialization of the products" (Chadwick, Abstract).

Therefore at the time of invention it would have been obvious to one skilled in the art of decision making via simulation to combine the work of Bauerle and Chadwick in order to include profit and loss in simulations for decision making.

As per claims 2-3 and 5, no further amendments or arguments have been given; therefore these rejections are as seen in the previous office action.

As per claims 6 and 16, Bauerle discloses, "Wherein the Bayesian network comprises hierarchical variables, abstract data types, differentials, user-defined functions, and POMDPs" (C1, particularly L67-68; C2, particularly L1-12; EN: *This denotes using computer science and computer programming to create the engines that deal with probabilities, outcomes, and utilities of these decision trees. The use of the above functions is well known within the art of computer science. For a discussion of*

*Bayesian logic and POMDPs, please see the attached reference "Acting under Uncertainty: Discrete Bayesian Models for Mobile-Robot Navigation" by Cassandra et al).*

As per claims 7-10, 12-13, 15, and 17-20, no further arguments or amendments have been given; therefore these rejections are as seen I the previous office action.

**Conclusion**

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ben M.

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Rifkin whose telephone number is (571) 272-9768. The examiner can normally be reached on Monday through Friday 9:00 AM-6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 14, 2007

Ben Rifkin  
Examiner  
Art Unit 2129

  
DAVID VINCENT  
SUPERVISORY PATENT EXAMINER